

The Path to Sediment Risk Management

Bruce K. Hope, Ph.D.

Oregon Department of Environmental Quality



Panel #5 - Risk Management Frameworks

**EPA Forum on Managing Contaminated Sediments at
Hazardous Waste Sites**

Arlington, VA

June 1, 2001

Risk management

Which / whose values to protect?

Are these values at risk ?

Is risk acceptable?

If not, what action to take?

Values?

Public health and the environment

Problem formulation is probably most important task

Demands transparency and stakeholder involvement

Interpretation & decision framework (analysis plan) laid out in advance

At risk?

Ideally, risk assessment is an honest attempt to find a rational basis for decisions, by analyzing available scientific evidence

Risk estimate

Transparency & stakeholder involvement

Assumptions \neq Conclusions

Beyond a worst-case analysis

Address uncertainty without paralysis

Allow for innovation in science & methods

Integrate HH & Eco, include ESA, anticipate NRD

Acceptable?

Risk assessment \neq risk management

Functional, not communication, separation

Only risk managers can decide what risk is acceptable

Risk-based management requires trust and on-going trust-promoting actions

Trust and acceptance are linked

Action?

science alone can never be an adequate basis for a risk decision. Risk decisions are, ultimately, public policy choices...

Risk estimate a decision factor but not the only factor

**Legal, Political, Regulatory, Technical,
Commercial / Economic, Community**

Aim at management that is proportional to the risk involved